

of ribonuclease on living cells, and the role of the nucleus in the synthesis of RNA and proteins. Jeener became professor of animal and comparative physiology. Although space was very limited, a substantial number of foreign visitors spent periods working in the various laboratories. In the late 1950s, new buildings were finally constructed for Chantrenne, which included an electron microscope purchased with funds from the Rockefeller Foundation.

In a letter to Pomerat on 27 May 1961, describing the dedication of the new electron microscope facility, Brachet also noted that he was “fighting on other grounds (money coming from the Government) for the support of Cell Biology and the development of Molecular Biology in Belgium.”⁹ As Burian (1996) discussed, the research by Brachet and his colleagues in the late 1940s and early 1950s on different forms of RNA and their role in protein synthesis contributed significantly to the development of molecular biology. Despite his important contribution in linking protein synthesis to RNA and RNA to the particles Claude labeled *microsomes*, Brachet’s research did not exert the impact that the Rockefeller laboratory did in developing the new field of cell biology. An important factor may have been the fact that Brachet and his collaborators focused solely on RNA and protein synthesis. Another is that electron microscopy was not central to their research. Probably even more important was that even as they employed cell fractionation, they were not committed to the differentiation of distinct fractions representing different functions. It was the breadth of Claude’s emerging vision that enabled the Rockefeller laboratory to set the agenda for the new discipline of cell biology.

Caspersson: Spectrographic Analysis, RNA, and Protein Synthesis

During the same period in which Brachet was linking microsomes, RNA, and protein synthesis, Caspersson was making similar connections at the Karolinska Institute in Stockholm. Caspersson had been a student of Einar Hammarsten, professor of chemistry at the Karolinska, who had himself been conducting research on protein chemistry, including relations between nucleic acids and proteins. In 1944, Caspersson was appointed to a new professorship in cell research at the Karolinska. Another Hammarsten student, Hugo Theorell, had been appointed as the first research professor of the Medical Nobel Institute in 1938, and the Nobel Institute provided funding for a new building to house both Theorell’s and Caspersson’s laboratories. Substantial grants from the Wallenberg Foundation and from the Rockefeller Foundation, which had been a long-time supporter of Hammarsten’s research,

⁹ Folder 40, Box 5, Series 707D, RG 1.2, Rockefeller Foundation Archives, RAC.